REMARKS/ARGUMENTS

The applicants have now had an opportunity to carefully consider the comments set forth in the Office Action that was mailed February 3, 2009. All of the rejections are respectfully traversed. Re-examination and reconsideration of the present application are respectfully requested.

The Office Action

In the Office Action that was mailed December 2, 2008:

claims 1-10 and 11-13 were rejected under 35 USC §101 for allegedly being directed to non-statutory subject matter;

claims 1-10 and 19-27 were rejected under 35 U.S.C. 103(a) as being unpatentable over D'Eletto (US 7,245,609) in view of Halford (US 6,707,894); and

claims 11-18 were rejected under 35 U.S.C. 103(a) as being unpatentable over D'Eletto (US 7,245,609) in view of Halford (US 6,707,894), Henrikson (US 2004/0218564) and Official Notice.

The Present Application

By way of brief review, the present application is directed to a method and apparatus for load-based billing in communication networks, wherein underutilization and/or overutilization of a network can be detected and analyzed by a network element in real-time and customers can be provided with a stimulus to better optimize traffic levels on the network.

An exemplary load-based billing method that may be implemented in the network 10 is shown in FIG. 2. As described in paragraphs [0026] and [0027] of the application, the switching center 14 monitors network utilization in real-time (step 102). As system utilization is monitored, the switching center 14 detects a reportable usage statistic as determined by predefined event triggers (step 104). The switching center 14 provides certain statistics of utilization levels to the Usage Level Application (ULA) 22 (step 106), Next, the ULA 22 determines whether a Usage Level Event has occurred, based upon one or more predefined event triggers (step 108). Triggers may include any one of the following: (1) a lower/upper level threshold, (2) trending thresholds, and (3) duration

thresholds, or (4) some combination of these thresholds. If the ULA 22 determines that a Usage Level Event has not occurred, then the ULA 22 takes no further action and waits for additional reportable statistics (step 110). Otherwise, the ULA 22 informs other elements in the network 10, such as the message service 18 and the billing platform 20 that a Usage Level Event has occurred and the scope of the Usage Level Event (step 112). The network 10, through the Broadcast Message Application (BMA) 24 and the messaging center 18, informs the subscribers (or end users) of a change in call pricing based upon the Usage Level Event (step 114).

FIG. 6 illustrates an alternative embodiment of the present invention whereby targeted messages are sent to specific users in a wireless network. As described in paragraphs of the specification, the ULA 402 sends a message 406 to a targeted marketing application (TMA) 408, indicating the event and the universe. The TMA 408 sends a request 410 to a database 412 for information regarding which calling plans are impacted by certain Usage Level Events and the new billing rates. Next, the TMA 408 sends a query 416 to a location (or presence) application 418 for information 420 concerning which subscribers are active in the "scope of the event" and for plans "impacted by the current event." The TMA 408 sends a request 424 for a specific short message for the appropriate users to a SMSC 426. The SMSC 426 accesses the HLR 422 to determine the user location 428 (MSC and cell). Once the SMSC 426 has the user location information, it must verify that the MSC/cell is within the "scope" 430. If the user has not changed location, the SMSC 426 will send a short message 432 to the correct MSC 402.

Accordingly, it is respectfully submitted that the methods and systems of the present application clearly involve more than one specific machine (e.g., the switching center 14, the ULA 22, the BMA 24, the message center 18).

Claims 1-13 Are Statutory

35 U.S.C. §101 indicates that "whoever invents or discovers any new and useful process, machine, manufacture or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title." (Emphasis added.)

Additionally, §100(b) indicates that when used in this title unless the context otherwise indicates --(b) the term "process" means process, art or method and includes a new use of a known process, machine, manufacture, composition of matter, or material.

It is respectfully submitted that claims 1-13 are clearly directed to useful processes and are, therefore, statutory.

In this regard, the Office Action asserts that Supreme Court precedent and recent Federal Circuit decisions indicate that a statutory process must (1) be tied to another statutory category (such as a particular apparatus) or (2) transform underlying subject matter (such as an article or material) to a different state or thing.

Without reference to language from claims 1-13, the Office Action further asserts that "applicant's method steps are not tied to a particular machine and do not perform a transformation. Thus, the claims are non-statutory."

This assertion is respectfully traversed. For example, independent claim 1 recites that certain steps are performed by various specific machines, including a switching center in the network, a usage level application, a broadcast message application, and a messaging center. Accordingly, claims 1-10 meet the test of a statutory process asserted by the Office Action (i.e., by identifying the apparatus that accomplishes the method steps).

Likewise, claim 11 recites that certain steps are performed by various specific machines, including a communication network, a switching center in the network, a usage level application, a subscriber database, and a messaging center. Accordingly, claims 11-13 meet the test of a statutory process asserted by the Office Action (i.e., by identifying the apparatus that accomplishes the method steps).

Accordingly, favorable reconsideration and withdrawal of the rejection of claims 1-13 under 35 U.S.C. §101 are respectfully requested.

Claims 1-10 and 19-27 are Patentably Distinguishable Over the Cited Art

Independent claim 1 recites, *inter alia*, monitoring utilization of the network by a plurality of network users in real-time via a switching center in the network, detecting at the switching center a reportable statistical event based upon the occurrence of a

predetermined event trigger, informing a usage level application of the reportable statistical event, determining at the usage level application whether a Usage Level Event has occurred, and recording at the usage level application the Usage Level Event, when it is determined that a Usage Level Event has occurred. Independent claim 19 recites similar features.

Applicants submit that neither D'Eletto nor Halford discloses at least the aforementioned features of independent claims 1 and 19. In particular, it is submitted that the primary citation to D'Eletto does not disclose the claimed features. Accordingly, without conceding the propriety of the asserted combination, the asserted combination of D'Eletto and Halford is likewise deficient, even in view of the knowledge of one of ordinary skill in the art.

The primary citation to D'Eletto relates to a method and system for identifying calls traversing a packet network. (D'Eletto, FIG. 1). The Office Action contends that the method and system described in D'Eletto meet the aforementioned features of independent claims 1 and 19. (Office Action, pages 3-6). This contention is respectfully traversed.

The claimed invention has an aggregated network-level aspect that D'Eletto does not. D'Eletto talks about generating CDRs (call detail records) for specific calls based on real-time events, but does not teach including the notion of how heavily loaded the network is from *OTHER* users. D'Eletto's invention may produce static billing records for a single user for a single call at the same time of day with the same routing, regardless of how busy the network is at the moment, e.g., due to some event or disaster. The claimed invention allows for the billing rates to change in real time due to network usage from everyone, and, moreover, aggregates network usage events based on thresholds and trending. D'Eletto is completely static about what it generates in the billing. D'Eletto may record usage statistics in the billing record for a particular call but these statistics are for historical reporting and do not affect billing rates for this call, and cannot be used to drive real-time user behavior to use or not use the network based on dynamically changing rates. Thus, D'Eletto cannot reasonably be interpreted to disclose the aforementioned features of independent claims 1 and 19.

The secondary citation to Halford relates to a method and system for processing

prepaid calling time to a subscriber. (Office Action, FIGS. 1-3). Halford suggests that it is possible to send a specific user a notification about, e.g., running out of money on a prepaid account, or about rates for that user based on his/her own usage and account details. But it does not teach the feature of broadcasting to many users simultaneously that billing rates are changing due to factors unrelated to those users' specific accounts or usage. Furthermore, Halford's invention is about notifiying a single user about remaining prepaid balance, which more likely would drive that user to talk less or talk fast. On the other hand, the claimed invention is about notifying many users that now is a good time to talk more, which would drive the users to make more calls. Applicants submit that Halford does not add anything that would remedy the aforementioned deficiency in D'Eletto.

Accordingly, favorable reconsideration and withdrawal of the rejection of claims 1-10 and 19-27 under 35 U.S.C. §103 are respectfully requested.

Claims 11-13 and 15-18 are Patentably Distinguishable Over the Cited Art

Applicants respectfully traverse the rejection of claims 11-13 and 15-18 (Office Action, pages 6-8) at least because the Office has failed to establish a *prima facie* case of obviousness as to these claims.

Independent claim 11 recites, *inter alia*, monitoring utilization of the network by a plurality of network users in real-time via a switching center in the network, detecting at the switching center a reportable statistical event based upon the occurrence of a predetermined event trigger, informing a usage level application of the reportable statistical event, determining at the usage level application whether a Usage Level Event has occurred, and recording at the usage level application the Usage Level Event and a scope of the event, when it is determined that a Usage Level Event has occurred.

Applicants submit that neither D'Eletto nor Halford discloses at least the aforementioned features of independent claim 11. In particular, it is submitted that the primary citation to D'Eletto does not disclose the claimed features. Accordingly, without conceding the propriety of the asserted combination, the asserted combination of D'Eletto and Halford is likewise deficient, even in view of the knowledge of one of ordinary skill in the art.

The primary citation to D'Eletto relates to a method and system for identifying calls traversing a packet network. (D'Eletto, FIG. 1). The Office Action contends that the method and system described in D'Eletto meet the aforementioned features of independent claim 11. (Office Action, pages 6-8). This contention is respectfully traversed.

The claimed invention has an aggregated network-level aspect that D'Eletto does not. D'Eletto talks about generating CDRs (call detail records) for specific calls based on real-time events, but does not teach including the notion of how heavily loaded the network is from *OTHER* users. D'Eletto's invention may produce static billing records for a single user for a single call at the same time of day with the same routing, regardless of how busy the network is at the moment, e.g., due to some event or disaster. The claimed invention allows for the billing rates to change in real time due to network usage from everyone, and, moreover, aggregates network usage events based on thresholds and trending. D'Eletto is completely static about what it generates in the billing. D'Eletto may record usage statistics in the billing record for a particular call but these statistics are for historical reporting and do not affect billing rates for this call, and cannot be used to drive real-time user behavior to use or not use the network based on dynamically changing rates. Thus, D'Eletto cannot reasonably be interpreted to disclose the aforementioned features of independent claim 11.

The secondary citation to Halford relates to a method and system for processing prepaid calling time to a subscriber. (Office Action, FIGS. 1-3). Halford suggests that it is possible to send a specific user a notification about, e.g., running out of money on a prepaid account, or about rates for that user based on his/her own usage and account details. But it does not teach the feature of broadcasting to many users simultaneously that billing rates are changing due to factors unrelated to those users' specific accounts or usage. Furthermore, Halford's invention is about notifiying a single user about remaining prepaid balance, which more likely would drive that user to talk less or talk fast. On the other hand, the claimed invention is about notifying many users that now is a good time to talk more, which would drive the users to make more calls. Applicants submit that Halford does not add anything that would remedy the aforementioned deficiency in D'Eletto.

Further, in rejecting claims 11-13 and 15-18 under 35 U.S.C § 103, the Office Action also contends:

> It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teachings of D'Eletto in view of Halford and Henrikson to include the features as taught by Examiner's Official Notice. One of ordinary skill in the art would have been motivated to combine the teachings in correctly bill a customer for the correct amount of airtime utilized.

Applicants respectfully traverse this attempted use of Official Notice as improper. Consequently, a necessary element of a *prima facie* case is absent.

Firstly, it is to be appreciated that the Office Action attempts to officially notice legal conclusions, –namely "that it is old and well known in the mobile cellular arts to have customers associated with an account/profile that would contain a billing rate information that relates to a calling plan and further the notification of the switch from an given rate to anther rate based on the lookup for customer calling plan information (e.g. notification from the switch from normal service to roaming service which leads to an entail of different price) that is extracted by an application that has ability to query customer profiles." Official Notice, however, is only proper for facts. (*MPEP § 2144.03*). Indeed, Official Notice is only permissible for those few facts that are of a "notorious character" and that are "capable of instant and unquestionable demonstration". (*MPEP § 2144.03(A)*). It is improper to use Official Notice for conclusions of law.

Secondly, the Office Action relies on Official Notice as the "principal evidence" upon which the rejection of claims 11-13 (and 15-18) is based. Official Notice cannot be used in this manner. As Section 2144.03(A) of the *MPEP* expressly warns, it is never appropriate to rely solely on Official Notice as the principal evidence upon which a rejection was based. Instead, Official Notice is only appropriate for facts and that serve to "fill in the gaps" in a rejection. (*MPEP § 2144.03(A)*). This is why official notice is to be judicially applied. (*MPEP § 2144.03*). It is unreasonable to conclude that the Office has used Official Notice to "fill in" a gap in this rejection.

Thirdly, the Office attempts to take Official Notice of matter that is not "capable of instant and unquestionable demonstration", as expressly required by section 2144.03(A) of the *MPEP*. Indeed, even assuming *arguendo* that the equivalence of the subject

queries is a fact, this fact would be neither of notorious character nor instantly and unquestionably demonstrable. Moreover, courts have long rejected the notion that official notice can be taken on the state of the art. (*See Memorandum to Patent Examining Corps from the Deputy Commissioner for Patent Examining Policy regarding Procedures for Relying on Facts Which are Not of Record as Common Sense or for Taking Official Notice*, n.6, *citing In re Eynde*, 480 F.2d 1364, 1370, 178 USPQ 470, 474 (CCPA 1973)). Thus, the Office's attempt to officially notice the level of ordinary skill in the art is improper as a matter of law.

In sum, the Office's attempts at Official Notice are improper and traversed. Consequently, there are evidentiary gaps in the rejection of claims 11-13 (and 15-18) that are fatal to a *prima facie* case of obviousness.

Finality of the Next Action Is Precluded

Applicants note the Office Action does not specifically reject independent claim 14. Indeed, although the Summary of the Office Action indicates that claim 14 stands rejected, the Detailed Action omits any explanation of how any cited art anticipates [or renders obvious] this claim. Applicants respectfully submit that this omission amounts to a failure to articulate a *prima facie* case of unpatentablity and the burden to rebut this "rejection" has not yet shifted to the Applicants. Consequently, a next Office action rejecting claim 14 cannot properly be made final since only then would the applicants be obligated to rebut the rejection, presuming that such an Office action sets forth a *prima facie* case. (See MPEP § 706.07(a)).

CONCLUSION

For at least the reasons detailed above, it is respectfully submitted all claims remaining in the application (Claims 1-27) are now in condition for allowance. The foregoing comments do not require unnecessary additional search or examination.

In the event the Examiner considers personal contact advantageous to the disposition of this case, he/she is hereby authorized to telephone John S. Zanghi, at 216.363.9000.

Respectfully submitted,

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4/30/09
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